

**REMARKS**

Claims 1-15, 30-33, 35 and 37-39, as amended, remain in this application. Claims 40-48 have been added. Claims 16-29, 34, and 36 have been cancelled. In view of the above amendments and remarks that follow, Applicant respectfully requests favorable consideration and timely indication of allowance.

***Rejection of Claims 1-15, 30-33, 38 and 39***

Claims 1-15, 30-33, 38 and 39 have been rejected under 35 USC §102(e) as allegedly being anticipated by Kitagawa (US 6,624,613 B2). In view of the foregoing amendments, this rejection is moot.

Kitagawa discloses a power supply and an external power source connected to a load. The power supply is configured with two batteries in parallel. When the external power source is removed from the load, the power supply enters into a “discharge state.”<sup>1</sup> In the discharge state, two switches, one at the input to each battery, are controlled to ensure that current does not flow between the two batteries if the discharging rates differ. In particular, the switches are controlled as a function of the voltage differential between the two batteries. When there is no voltage differential between the two batteries, the two batteries are connected to the load in parallel. Should a voltage differential develop between the two batteries due to differing discharge rates, the battery with the highest voltage is connected to the load until it sufficiently discharges so that there is no longer a voltage differential between the two.

Applicant discloses a novel and unobvious approach for extending battery life in an electronic device. This is achieved by operating two batteries in a pulse current discharge mode and alternatively switching the two batteries to the load to provide a continuous current source. In contrast to the teachings of Kitagawa, the two batteries operate in a pulse discharge mode regardless of whether a voltage differential exists between them. This concept is captured in claim 1 where first and second batteries operate in “a pulse current discharge mode while supplying continuous current to a load when no voltage differential exists between the first and second batteries.” Since

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<sup>1</sup> In the previous Office action dated July 18, 2007, the Examiner relied on the fourth embodiment disclosed in Kitagawa in rejecting the claims, which is directed to a process of charging the batteries. After Applicant pointed this out in its response, the Examiner has asserted new grounds for rejecting the claims, relying on the eighth embodiment disclosed in Kitagawa.

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Kitagawa discloses a power supply in which both batteries are connected to the load when there is no voltage differential between them, it cannot anticipate claim 1.

Claim 11 contains similar limitations to claim 1, and therefore, is also patentable over Kitagawa.

Claim 30 recites a wireless communications device in which a power management module operates first and second batteries in “a pulse current discharge mode while supplying continuous current to the processor in response to the wireless communications device being operated in the traffic state.” (emphasis added).

In the previous Office action dated July 18, 2007, the Examiner rejected claim 30 based on the combination of Kitagawa and Shyr (US 5,903,764). Acknowledging that Kitagawa lacked disclosure to a wireless communications device, the Examiner argued that Shyr disclosed a processor configured to support wireless communications and a power management module responsive to wireless communications in a traffic state. According to the Examiner, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Kitagawa with the teachings of Shyr in order to meet the operating constraints imposed by having two batteries.

In rejecting claim 30, the Examiner misread the claim. It is not the power management module that needs to be responsive to a wireless device operated in a traffic state as argued by the Examiner, but rather the pulse current discharge mode of operation that must be responsive to a wireless device operated in a traffic state. Neither Kitagawa nor Shyr, either alone or in combination, teach or suggest operating batteries in a pulse discharge mode in response to a wireless device switching from an idle state to a traffic state. Accordingly, claim 30 is also patentable over the art of record.

Claim 41 recites a power source in which first and second batteries are operated in a “pulse current discharge mode while supplying continuous current to a load in response to the current required by the load exceeding a threshold.” None of the references cited by the Examiner, either alone or in combination, teach or suggest this concept. Although Kitagawa discloses a power supply configured to switch the batteries to the load when it detects current flowing between the batteries, it does not teach operating the batteries in a pulse current

discharge mode in response to the level of load current.<sup>2</sup> Accordingly, claim 41 is also patentable.

Claims 2-10, 12-15, 31-33, 35, 37-40, and 42-48 are dependant, either directly or indirectly, from one the independent claims (i.e., claims 1, 11, 30 and 41), and therefore, include all the limitations of the claims from which the respectively depend. Accordingly, these claims are also allowable over the art of record for the same reasons set forth hereinbefore, as well as the additional limitations recited. These additional limitations will not be addressed at this time because a *prima facie* case has not been established against the independent claims.

### ***Rejection of Claims 34-37***

Claims 34, 36 and 37 have been rejected under 35 USC §103(a) as allegedly being unpatentable over Kitagawa as applied to claim 32, and further in view of Leifer (US 6,459,171 B1). Claim 35 has been rejected under 35 USC §103(a) as allegedly being unpatentable over Kitagawa and Leifer as applied to claim 34, and further in view of Mole (US 6,522,873 B1). In view of the foregoing amendment to claim 30, from which these claims depend, this rejection is moot.

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<sup>2</sup> In the Office action, the Examiner has rejected claim 7 which recites intermittently coupling the first and second batteries to the load if the measured current reaches a threshold. In rejecting this claim, the Examiner improperly relies on the disclosure of Kitagawa for teaching a power supply configured to switch the batteries to the load when current flows between the batteries. Current flow is detected in Kitagawa by monitoring two current sensing resistors, one at the input to each battery. This is entirely different from operating the batteries in a pulse current discharge mode based on the measured load current as required by claim 7.

**REQUEST FOR ALLOWANCE**

In view of the foregoing amendments and remarks, it is respectfully submitted that this application is now in condition for allowance, and accordingly, reconsideration and allowance are respectfully requested. Should any issues remain which the Examiner believes could be resolved in a telephone interview, the Examiner is requested to telephone Applicant's undersigned attorney.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.

Respectfully submitted,

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